SAT Report for Case # P-13-0930

General

[redacted]

Report Status: Complete **Status Date:** 10/21/2013
CRSS Date: 10/21/2013 **SAT Date:** 10/22/2013 **SAT Chair:** J. Kwiat
Consolidated PMN?
Consolidated Set:
Submitter: [redacted]
CAS Number: [redacted]
Ecotox Related Cases: SNUR codified 40 CFR 721.5740; [redacted]
Health Related Cases: [redacted]
Chemical Name: [redacted]
Use: [redacted]
Trade name: [redacted]
PV Max (kg/yr):
Ecotox Assessor: **Fate Assessor:** **Health Assessor:**

Physical Chemical Information

Molecular Weight:	[redacted]	**Physical State - Neat:**	[redacted]		
Percent 500:		**Percent 1000:**			
Melting Point (Measured):	[redacted]	**Melting Point (est):**		**MPD (EPI):**	
Vapor Pressure:		**Vapor Pressure (est):**	< [redacted]	**VP (EPI):**	
Water Solubility:	0.003770	**Water Solubility (EST):**		**Water Solubility (EPI):**	
Log Kow:	[redacted]			**Log Kow (EPI):**	
Log P:		**Log P Comment:**			

SAT Concern

Ecotox Rating (1):	3	**Ecotox Rating Comment (1):**	
Ecotox Rating (2):		**Ecotox Rating Comment (2):**	
Health Rating (1):	2-3	**Health Rating Comment (1):**	
Health Rating (2):		**Health Rating Comment (2):**	

PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments

Persistence	Bioaccumulation	Toxicity	Comments
2	1	2	

Exposure Based Review (Health)?	N
Exposure Based Review (Ecotox)?	Y
SAT Keywords:	LIVER

Fate Assessment Summary:	P-13-0930 FATE: Solid with MP = [redacted] C (M) log Kow = [redacted] (M) S = [redacted] mg/L at 25 C (M) VP < [redacted] torr at 25 C (E) BP = 398 C (E) H < 1.00E-8 (E) log Koc = 5.04 (E) log Fish BCF = 2.42 (E) log Fish BAF = 1.21 (E) POTW removal (%) = 39 via sorption and possible partial biodeg; OECD 301B(Mod Sturm CO2 ev): 0-3.7%/31d; OECD 301B(Mod Sturm CO2 ev): 0%/35d. Time for complete ultimate aerobic biodeg = mo Sorption to soils/sediments = v.strong PBT Potential: P2B1 *CEB FATE: Migration to ground water = negl
Removal in WWT/POTW (Overall):	39

Condition	Rating Values w/ Rating Description	Comment
WWT/POTW Sorption:	1-2	
WWT/POTW Stripping:	4	
Biodegradation Removal:		

Condition	Rating Values w/ Rating Description	Comment
Biodegradation Destruction:	3	
Aerobic Biodeg Ult:	3	
Aerobic Biodeg Prim:		
Anaerobic Biodeg Ult:	3-4	
Anaerobic Biodeg Prim:		
Hydrolysis (t1/2 at pH 7,25C) A:		
Hydrolysis (t1/2 at pH 7,25C) B:		
Sorption to Soils/Sediments:	1	
Migration to Ground Water:	1	
Photolysis A, Direct:		
Photolysis B, Indirect:		
Atmospheric Ox A, OH:		
Atmospheric Ox B, O3:		

Health Assessment

Health Summary:	Absorption is nil through the skin for the neat material, poor through the skin for the material in solution, and poor through the lung and GI tract, based on physical/chemical properties. There are concerns for adverse effects to the liver, kidney, and blood, systemic, reproductive and developmental toxicities, sensitization and photosensitization, and endocrine disruption, as well as uncertain concern for oncogenicity, based on Bisphenol A and its analogs.
Routes of Exposure:	Dermal Drinking Water Inhalation

Test Data Submitted

Test Data Submitted: Submitted with [redacted]

Rat subchronic (13 wk) inhalation NOEL 150 mg/m3;
Rar oral LD50 > 5 g/kg;
Rabbit acute dermal LD50 > 3.7 g/kg;Not a dermal irritatn in rabbits;
Mild eye irriatnt in rabbits

Submitted 8e) data:

8e) 3446: rat 90D inhalation toxicity study, nasal passage changes at 50 and 150 mg/m3;
8e)14473: rat 3-gen dietary study, body weight changes and sex organ abnormalities at 750 and 7500 ppm;
8e) 14686: snail study (not specified). effects on sex organs and sexual functions at concentrations as low as 1 ug/l;
8e)15079:mouse mutagenicitystudy, single dose caused chromosome aberrations at 20 and 40 ng/g;
8e)17275: rat developmental study (diet), systemic toxicity NOAEL 5.85 mg/kg;

NTP data (abstracts):

RACB84080: Mouse reproduction/fertility study (diet), with reductions in litter numbers, pups per litter, and pup weights for first generation subjects at 0.5% and 1.0%;
TER85051: Rat reproduction/developmental study, no NOAEL established for parent, fetal NOAEL 640 mg/kg (maternal toxic dose);
TER85052: Mouse reproduction/developmental study, no NOAEL established for parent, NOAEL 1250 mg/kg for fetal deformations;
TR-215: Rat/Mouse carcinogenicity assay (diet), with results equivocal for BPA carcinogenic potential

Ecotox Assessment

Test organism	Test Type	Test Endpoint	Predicted	Measured	Comments
Fish	96-h	LC50	0.16		
Daphnid	48-h	LC50	0.35		
Green Algae	96-h	EC50	0.43		
Fish	-	Chronic Value	0.054	0.16	
Daphnid	-	Chronic Value	0.11	0.061	
Green Algae	-	Chronic Value	0.093		

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Acquatic:				
Chronic Acquatic:		10	5	

Ecotox Route of Exposure?	All releases to water

Factors	Values	Comments
SARs:	polyphenols	
SAR Class:	polyphenol	
TSCA NCC Category?	None	

Recommended Testing

Ecotox Value Comments

Predictions are based on SARs for polyphenols; SAR chemical class = polyphenol; MW [redacted]

[redacted] with mp unknown (P); log Kow = 5.34 (EPI), [redacted] (M); S = [redacted] mg/L at 20 C (P); pH7; effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150.0 mg/L as CaCO3; and TOC <2.0 mg/L;

This material is a potential endocrine disruptor to aquatic and terrestrial wildlife.

Ecotox Factors Comments